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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,319	07/02/2001	G. Scott Smith	020699-000310US	4767

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EXAMINER

GELAGAY, SHEWAYE

ART UNIT PAPER NUMBER

2137

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/898,319		SMITH ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Shewaye Gelagay		2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-6 and 8-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

1. This office action is in response to Applicant's amendment filed on December 22, 2005. Claims 1-6, 10, 12-13 and 16 have been amended. Claim 7 has been cancelled. New claims 17-18 are added. Claims 1-18 are pending.

### ***Claim Rejections - 35 USC § 112***

2. In view of the amendment filed December 22, 2005, the Examiner withdraws the rejection of claim under 35 U.S.C. 112, first paragraph.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 3 recites the limitation "the single media" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5, 10-11, 13, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki United States Letters Patent Number 6,807,365 in view of Saito et al. (hereinafter Saito) U.S. Patent 6,069,952.

As per claims 1 and 18:

Aoki teaches a method of transferring encrypted content via a bus in a system where keys are periodically changed, the method comprising:

receiving the encrypted content via the bus; (Abstract; Col. 2, lines 14-34; Col. 3, lines 34-65; Col. 4, line 3)

receiving a first key for decrypting the encrypted content; (Col. 3, line lines 34-65; Col. 4, lines 3-4)

encrypting the first key with a second key to form an encrypted first key; (Col. 4, lines 4-6; Col. 14, lines 1-3)

combining the encrypted content with the encrypted first key to form a combined encrypted content; (Col. 14, lines 3-6)

storing the combined encrypted content on a storage media; (Figure 11; Col. 13, line 66-Col. 14, line 6)

in response to a request for the stored encrypted content, decrypting the encrypted content to obtain clear text content; (Abstract; Col. 14, lines 7-18)

transmitting the encrypted content via the bus. (Abstract; Col. 2, lines 14-34; Col. 3, lines 34-65; Col. 4, line 3; Col. 11, lines 3-20)

Aoki does not explicitly disclose encrypting the clear text content with a third key. Saito in analogous art, however, discloses data is encrypted by a third key and transmitted via communication network to a third terminal. (Col. 7, lines 46-50)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Aoki to include encrypting the clear text content with a third key. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Saito (Abstract) in order to encrypt data by different keys when a user stores, copies, or transfer data. This can be applied to data copyright management system for by controlling the different keys used in encrypting and decrypting the data.

As per claim 2:

The combination of Aoki and Saito teach all the subject matter as discussed above. In addition, Aoki further discloses wherein said decrypting step further comprises:

retrieving the combined encrypted content from the storage media; (Figure 11; Col. 13, line 66-Col. 14, line 6)

decrypting the encrypted first key to obtain the first key; (Abstract; Col. 14, lines 7-18) and

decrypting the encrypted content with the first key to recover clear text content.  
(Abstract; Col. 14, lines 7-18)

As per claims 3 and 13:

The combination of Aoki and Saito teach all the subject matter as discussed above. In addition, Aoki further discloses a method and an apparatus comprising:

further encrypting the encrypted first key prior to storage on the single media.  
(Col. 4, lines 4-6; Col. 14, lines 1-3)

As per claims 4 and 11:

The combination of Aoki and Nishimura teach all the subject matter as discussed above. In addition, Aoki further discloses a method and an apparatus wherein the combined encrypted content includes a stream. (Col. 8, lines 30-41)

As per claim 5:

The combination of Aoki and Saito teach all the subject matter as discussed above. In addition, Aoki further discloses storing the second key with the combined encrypted content on the storage media. (Col. 14, lines 3-6)

As per claim 10:

Aoki teaches an apparatus for transferring encrypted content via a bus in a system where keys are periodically changed, the method comprising:

a processor; (Col. 9, line 20)

a machine-readable medium including instruction executable by a processor for:

receiving the encrypted content via the bus; (Abstract; Col. 2, lines 14-34; Col. 3, lines 34-65; Col. 4, line 3)

receiving a first key for decrypting the encrypted content; (Col. 3, line lines 34-65; Col. 4, lines 3-4)

encrypting the first key with a second key to form an encrypted first key; (Col. 4, lines 4-6; Col. 14, lines 1-3)

combining the encrypted content with the encrypted first key to form a combined encrypted content; (Col. 14, lines 3-6)

storing the combined encrypted content on a storage media; (Figure 11; Col. 13, line 66-Col. 14, line 6)

in response to a request for the stored encrypted content, decrypting the encrypted content to obtain clear text content; (Abstract; Col. 14, lines 7-18)

transmitting the encrypted content via the bus. (Abstract; Col. 2, lines 14-34; Col. 3, lines 34-65; Col. 4, line 3; Col. 11, lines 3-20)

Aoki does not explicitly disclose encrypting the clear text content with a third key. Saito in analogous art, however, discloses data is encrypted by a third key and transmitted via communication network to a third terminal. (Col. 7, lines 46-50)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Aoki to include encrypting the clear text content with a third key. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Saito (Abstract) in order to encrypt data by different keys when

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a user stores, copies, or transfer data. This can be applied to data copyright management system for by controlling the different keys used in encrypting and decrypting the data.

As per claim 16:

The combination of Aoki and Nishimura teach all the subject matter as discussed above. In addition, Aoki further discloses comprising:

a combiner; (Figure 1, line 13)

a decryption module, coupled to said combiner and said storage media, adapted to receive key information from said combiner and encrypted content and key from said storage media and to generate clear text content; (Figure 7; Abstract; Col. 14, lines 7-18) and

an encryption module, coupled to said decryption module, for encrypting said clear text content with a negotiated key. (Figure 7; Abstract; Col. 14, lines 7-18)

8. Claims 8-9 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki United States Letters Patent Number 6,807,365 in view of Saito et al. (hereinafter Saito) U.S. Patent 6,069,952 and further in view of Just et al. (hereinafter Just) United States Letters Patent Number 6,567,914.

As per claims 8 and 14:

The combination of Aoki and Saito teaches all the subject matter as discussed above. Neither of the references explicitly disclose a method wherein the further encrypting uses a different algorithm than that used that used in encrypting the first key.



Just in analogous art, however, discloses a method and apparatus wherein the further encrypting uses a different algorithm than that used that used in encrypting the first key. (Col. 8; lines 9-14)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method and apparatus disclosed by Aoki and Nishimura to include wherein the further encrypting uses a different algorithm than that used that used in encrypting the first key. This modification would have been obvious because a person having ordinary skill in the art would have been motivated by the suggestions, provided by Just (Col. 8; lines 15-16) in order to facilitate a higher level of security for the encrypted message.

As per claims 9 and 15:

The combination of Aoki, Saito and Just teaches all the subject matter as discussed above. In addition, Just further discloses a method and apparatus wherein an algorithm includes one or more of DES, XOR, M2, M6+, IDEA. (Col. 7, lines 13-18)

9. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki United States Letters Patent Number 6,807,365 in view of Saito et al. (hereinafter Saito) U.S. Patent 6,069,952 and further in view of Nagai et al. (hereinafter Nagai) United States Letters Patent Number 6,938,162.

As per claims 6 and 12:

The combination of Aoki and Saito teaches all the subject matter as discussed above. Neither of the references explicitly discloses a method wherein the second key with is stored in a header of a file that includes the combined encrypted content. Nagai

in analogous art, however, discloses a method wherein a header area for storing a decipher key that is required for decrypting the encrypted data. (Col. 6, lines 23-29)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Aoki and Saito to include a method wherein the second key with is stored in a header of a file that includes the combined encrypted content. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Nagai (Col. 3, lines 62-64) in order to provide a system which can set the robustness level of an encryption by enhancing the reliability of a decipher key that is required to decrypt data which required for copyright protection.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki United States Letters Patent Number 6,807,365 in view of Saito et al. (hereinafter Saito) U.S. Patent 6,069,952 and further in view of Nishimura et al. (hereinafter Nishimura) United States Letters Patent Number 6,834,111.

As per claim 17:

The combination of Aoki and Saito teaches all the subject matter as discussed above. Neither of the references explicitly discloses a method wherein the bus complies with an IEEE 1394 protocol. Nishimura in analogous art, however, discloses a method wherein the bus complies with an IEEE 1394 protocol. (Col. 11, lines 53-58; Col. 20, lines 17-20; Col. 21, lines 2-4) Therefore, it would have been obvious to one ordinary skill in the art to modify the method disclosed by Aoki as suggested by Nishimura (Col.

20, line 55-56) in order transfer data such as picture, voice, etc. requiring real-time guarantee.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Aoki and Saito to include wherein the bus complies with an IEEE 1394 protocol. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Nishimura (Col. 20, line 55-56) in order transfer data such as picture, voice, etc. requiring real-time guarantee.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shewaye Gelagay whose telephone number is 571-272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shewaye Gelagay  
2/8/06

  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER